UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

64280 7590 07/09/2009

MINTZ, LEVIN, COHN, FERRIS, GLOVSKY & POPEO, P.C. ONE FINANCIAL CENTER BOSTON. MA 02111

EXAMINER				
MORRISON, JAY A				
ART UNIT PAPER NUMBER				
2168				
DATE MAILED: 07/09/20	009			

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/717,186	11/18/2003	Hartmut Koerner	34874-022/2003P00820	6226		
TITLE OF INVENTION: DELTA-MECHANISM FOR INTEGRATION OF OLAP-BASED PLANNING AND REPORTING						

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/09/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification a) specifying a new o	of n	naintenance fees w pondence address;	ill be and/or	mailed to the current (b) indicating a sepa	corres	spondence address as FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission.				estic mailings of the other accompanying formal drawing, must	
64280 MINTZ, LEVI ONE FINANCL BOSTON, MA	AL CENTER	IS, GLOVSKY &	POPEO, P.C.	I her State addr trans	eby certify that thi	s Feet	of Mailing or Trans) Transmittal is being ficient postage for first ISSUE FEE address I) 273-2885, on the d	deno.	sited with the United
									(Depositor's name)
				L					(Signature)
				Ц					(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	ENTOR ATTORNEY DOCKET NO. CONFIRMATION			NFIRMATION NO.		
10/717,186 TITLE OF INVENTION	11/18/2003 EDELTA-MECHANISM	M FOR INTEGRATION	Hartmut Koerner OF OLAP-BASED P		NING AND REPO		4-022/2003P00820 3		6226
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE I	UE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	Т	DATE DUE
nonprovisional	NO	\$1510	\$300		\$0	\$1810			10/09/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	3					
MORRISO	ON, JAY A	2168	707-103000						
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATZ less an assignce is ident h in 37 CFR 3.II. Comp	nge of Correspondence Indication form ed. Use of a Customer	(I) the names of a or agents OR, alter (2) the name of a registered attorney 2 registered patent listed, no name with the PATENT (print of the particular of	ip to mativ single or a attor II be or typ he pa	e firm (having as a gent) and the name meys or agents. If a printed. e) tent. If an assigne- assignment.	membes of u	er a 2	ocume	nt has been filed for
Please check the appropriate. 4a. The following fee(s). Issue Fee		categories (will not be pa	inted on the patent): D. Payment of Fee(s): A check is enclose	Plea		<u> </u>	on or other private gro lously paid issue fee	<u> </u>	<u> </u>
Publication Fee (No small entity discount permitted) Advance Order - # of Copies			Payment by cred	it care	Form PTO-2038 authorized to charge it Account Number	is atta ge the i	ched. required fee(s), any de (enclose a	ficienc n extra	cy, or credit any copy of this form).
	s SMALL ENTITY state	is. See 37 CFR 1.27.					TTY status. Sec 37 Cl		
interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other to Office.	han ti	ne applicant; a regi	stered a	ittorney or agent; or th	ie assi	gnee or other party in
Authorized Signature Date									
Typed or printed name					Registration N				
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but (irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the e Chief Information C COMPLETED FORM	or nois esti indiv office IS TO	etain a benefit by the imated to take 12 m idual case. Any co r, U.S. Patent and D'THIS ADDRESS	ne publ ninutes mment Fraden . SENI	ic which is to file (and to complete, including s on the amount of the lark Office, U.S. Dep D TO: Commissioner	by the great great by the great grea	e USPTO to process) sering, preparing, and a require to complete at of Commerce, P.O. tents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Micxandra, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 07/09/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/717,186	11/18/2003	Hartmut Koerner	34874-022/2003P00820	6226		
64280 7590 07/09/2009			EXAMINER			
MINTZ, LEVIN	, COHN, FERRIS, G	MORRISON, JAY A				
ONE FINANCIAL CENTER			ART UNIT PAPER NUMBER			
BOSTON, MA 02111			2160			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 374 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 374 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/717,186 KOERNER ET AL. Notice of Allowability Examiner Art Unit JAY A MORRISON 2168 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 4/3/09. The allowed claim(s) is/are 1,2,5-11 and 13-20. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements

- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

noted below. Failure to timely comply will result in ABANDONMENT of this application.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of

each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the

attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

A	ttac	hme	nt(s)	
4		Mindia		Deferen

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7.

 Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

/Tim T. Vo/ Supervisory Patent Examiner, Art Unit 2168 Application/Control Number: 10/717,186

Art Unit: 2168

DETAILED ACTION

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Claims 1-2, 5-11 and 13-20 are allowable over the prior art of record. The closest prior art of record Benson, teaches record deltas which include value information associated with records in directories, however it fails to teach delta buffers which include a logical key corresponding to a database of objects, these limitations being indicated in claim 1 as "a delta buffer configured to store a delta record, wherein the delta record characterizes a difference between the one or more data objects and a modified version of the one or more data objects, the modified version being a result of a change made by the business planning tool to the data objects accessed from the database, the data objects buffered in the data buffer having a logical key corresponding to the database of the data objects, a description of an aggregation level described by characteristics and key figures from which aggregates of the data object may be constructed", in claim 9 as "updating the data object in the data buffer with the delta record, the data object buffered in the data buffer having a logical key corresponding to the database of the data objects" and in claim 13 as " a delta buffer configured to store a delta record characterizing a difference between the one or more data objects and a modified version of the one or more data objects, the modified version being a result of a change made to the one or more data objects by the

Application/Control Number: 10/717,186

Art Unit: 2168

business reporting tool, the business planning tool, or both, the data objects buffered in the data buffer having a logical key corresponding to the database of the data objects".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-7112. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/717,186 Page 4

Art Unit: 2168

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

/Tim T. Vo/ Supervisory Patent Examiner, Art Unit 2168

Business Center (EBC) at 866-217-9197 (toll-free).

Jay Morrison TC2100 Tim Vo TC2100